

## CLAIMS

What is claimed is:

- 1           1.     A method comprising:  
2                 fixing a logical identifier for a signal line at an egress interface;  
3                 mapping a first physical identifier for a first physical signal line to the  
4 logical identifier; and  
5                 remapping a second physical identifier for a second physical signal line  
6 to the logical identifier responsive to a line failure on the first physical signal line.
- 1           2.     The method of claim 1 wherein mapping comprises:  
2                 writing to a cross connect table and wherein remapping comprises  
3 rewriting the cross connect table.
- 1           3.     The method of claim 1 further comprising:  
2                 switching a signal from a second physical signal line to a physical line  
3 corresponding to the logical identifier responsive to the remapping.
- 1           4.     The method of claim 1 wherein fixing comprises:  
2                 assigning an identifier to each port of the egress interface during  
3 initialization; and  
4                 preventing change to the identifier after initialization.
- 1           5.     The method of claim 1 wherein the signal line is a synchronous optical  
2 networking (SONET) line.
- 1           6.     An apparatus comprising:  
2                 a bus interface;  
3                 an ingress time slot interchange (ITSI) module;  
4                 a switch fabric coupled to the ITSI module;  
5                 an egress time slot interchange (ETSI) module having a plurality of  
6 inputs, each input assigned a logical identifier which remains fixed after  
7 initialization; and

8 a translation module to translate an incoming signal identifier to one  
9 of the logical identifiers independent of a physical line on which the signal is  
10 received.

1 7. The apparatus of claim 6 wherein the translation module comprises:  
2 a cross connect table.

1 8. The apparatus of claim 1 further comprising:  
2 a bus coupled to the bus interface;  
3 a termination module coupled to the bus; and  
4 a line interface having an optical to electrical (O/E) and electrical to  
5 optical (E/O) converter.

1 9. The apparatus of claim 6 wherein the apparatus is implemented as an  
2 ASIC on a backplane of a line card.